Structuralism:

Although E. B. Titchener professed to be a loyal follower of Wilhelm Wundt, Titchener dramatically altered Wundt's system of psychology when he brought it from Germany to the United States. Titchener offered his own approach, which he called structuralism, yet claimed it represented psychology as set forth by Wundt. In reality, the two systems were radically different, and the label "structuralism" can properly be applied only to Titchener's psychology. Structuralism attained a prominence in the United States and lasted some two decades before it was overthrown by newer movements.

According to structuralists, the main objective of psychology is to study and understand the structure of human mind by analyzing mental experience and discovering the various elements and the man ner they are compounded. The school uses the method of introspection to identify the basic elements or "structures" of psychological experience.

Definition and Subject Matter:

Wundt defined psychology as a science that investigates "the facts of consciousness" (Wundt, 1912/1973, p. 1). According to Wundt, psychologists should be concerned with the study of immediate experience rather than mediate experience.

Mediate experience provides information about something other than the elements of that experience. It is associated with physical science,an e**xperience that is mediated** by some device of accurate measure.

Immediate experience is unbiased by interpretation. It is the Direct experience gained through immediate sense perception. Introspection makes use of immediate experience in analyzing the contents of mediate experience.

Titchener defined psychology as the analytic study of the generalized adult normal mind through introspection

The Problem of Psychology:

Science, according to Titchener, always seeks to answer three sorts of questions: what, how, and why? What questions deal with the basic, most uncomplicated elements of the subject (e.g., what is water made of?). How questions deal with the appearances of things.

The first problem for psychology is to identify the basic elements of experience, such as irreducible sensations or simple images. The second task is to assess the ways in which elements combine. The third is to determine causal relations in these phenomena. We shall return later to a more detailed consideration of these problems.

Elements of Conscious Experience: Wundt outlined his goals as follows:

- Analyze conscious processes into their basic elements.

SHOUT
SHARE
IT

• Discover how these elements are synthesized or organized.

• Determine the laws of connection governing the organization of the elements.

Wundt gave 2 basic classes of elements: sensations and feelings. While, Titchener defined three elementary states of consciousness: sensations, images, and affective states.

Sensations are the basic elements of perception and occur in the sounds, sights, smells, and other experiences evoked by physical objects in our environment. Sensations are aroused whenever a sense organ is stimulated and the resulting impulses reach the brain. Sensations can be classified by intensity, duration, and sense modality.

Images are the elements of ideas, and they are found in the process that reflects experiences that are not actually present at the moment, such as a memory of a past experience.

Affective states, or affections, are the elements of emotion and are found in experiences such as love, hate, and sadness. Feelings are the subjective complements of sensations but do not arise directly from a sense organ.

Diff: Wundt recognized no fundamental difference between sensations and images because images are also associated with excitation of the cerebral cortex. He also referred to the combination of elements as a psychic compound. "Every psychic compound has characteristics which are by no means the mere sum of the characteristics of the elements" (Wundt, 1896)

Both Wundt and Titchener proposed that the basic elements of experience have certain attributes: Wundt talked about Quality and Intensity of experience.

Titchener added Duration, Clearness and sometimes Extensity.

((Quality: the attribute that distinguished every elementary process from every other. For example: Sound (a particular pitch); Colour (yellow, purple) ; Taste (sweet, salty, sour)

Intensity: the attribute that placed quality on a scale from lowest to highest. For example: Sound (soft-loud); Colour (dim-bright); Taste (over sweet-subtle sweet)

Duration: temporal attribute of the experience.Itcouldbelongorshort

Clearness: determined the place a particular process had in consciousness. Clarity meant that **the experience was** dominant and outstanding.

Extensity: Titchener proposed that it belonged only to vision and touch. These experiences could be considereds to be spread out in space. These elements and their attributes constituted the whole structure of consciousness.**))**

The Tridimensional Theory oF Feeling:

By varying the speed of the metronome and introspecting and reporting on his immediate conscious experiences (his sensations and feelings) , Wundt arrived at three dimensions of feelings: pleasure/ displeasure, tension/ relaxation, and excitement/Every elementary feeling could be effectively described by determining its location within this three-dimensional space—that is, its position on each of the dimensions.

((Wundt considered emotions to be complex compounds of elementary feelings, if one could pinpoint the elementary feelings within the three-dimensional grid, then emotions could be reduced to these mental elements. Eg: Certain sensations result in specific feelings. Thus, a bitter taste or a smell like ammonia is unpleasant almost to the point of pain, whereas sweetness is usually pleasurable. Wundt noted that red is exciting and blue is quieting. Colors, like music, may produce relaxation or strain. Rarely are feelings isolated or partial with respect to the dimensions specified by Wundt. Instead, they combine to form a meaningful compound. Thus, a given sensation may be pleasurable and exciting or pleasurable and relaxing. Varieties of combinations are possible. So-called emotions such as joy or hope represent pleasurable feelings tied to a particular cognitive content. Anger or fear may represent feelings of strain and unpleasantness tied also to a particular cognitive content.))

Titchener argued that mere sensations of organic conditions can hardly be identified with the richer, more complex experience of an emotion. Titchener did not deny the importance of organic correlates of emotion but argued for a much broader conception. As Titchener's theory developed, the relationship between affect and emotion became troublesome. Titchener was suspicious that affections are really nothing more than sensations of pleasantness or unpleasantness. He said that the other dimensions in Wundt's Theory could be reduced to sensory elements, in particular, muscular and organic. Titchener believed that emotions are simply intensified feelings arising from sensations inside the body. He suggested two methods to study emotions: Impression & Expression.

SENSATIONS AND PERCEPTIONS: Wundt (1912/1973) defined sensation as an element of consciousness (p. 45). In addition to sensations, there are perceptions and ideas. He noted that the term perception generally refers to combinations of outward sense impressions (e.g., an object of a particular shape and color may be called an apple). An idea, by contrast, generally refers to combinations that may come from memory, previous associations, and so on. Wundt questioned the validity of the distinction between idea and perception. In both cases, we observe compounds or combinations and both can be equally lively as experienced phenomena.

Attention: The whole content of consciousness is called the field of consciousness. The components of consciousness are organized into a focus and a field. Focus is determined by an aspect of conscious function called attention. For Wundt, attention was the clear perception of a narrow region of consciousness. While,Tichener distinguished between passive or involuntary attention and active or voluntary attention. He referred to involuntary attention as primary and to voluntary attention as secondary.

((Both represent types of consciousness that are identifiable at different stages of development. *Primary attention:* An attention that we are compelled to give and are powerless to prevent".

Titchener believed that certain qualities are irresistible and observed that, in his own case, attention was commanded by stimuli such as the smell of musk, a bitter taste, or the sight of yellow. Examples of other factors that control involuntary attention include novelty and suddenness.

Secondary attention involves a focus on a subject that would not normally call attention to itself.))

Association And Apperception Wundt believed that compounds or combinations of elements may be passive or active.

He described passive combinations as associations and active combinations as apperceptions. The distinction between association and apperception is important in Wundt's thought and carries implications for his larger psychological system. Association and apperception are illustrated in the distinction between mere rote memory and memory with real awareness. Apperception is the process of organizing mental elements into a whole is a creative synthesis (also known as the law of psychic resultants), which creates new properties from the building up or combining of the elements. Sensations were experimentally studied through psychophysical methods using *W*eber-Fechner concepts of absolute and differential thresholds. Touch was examined by determining two-point threshold first developed by Weber. There were also studies of color contrast, color mixing, e*y*e-movements Wundt attempted to develop a way of studying the stages which existed in a complex perceptual situation through measuring Reaction Time. Titchener defined as Perceptions as selected groups of sensations in which images are incorporated as an integral part of the whole process and it is in this - that perceptions have meaning.

Methodology(Introspection):

Wundt decided that the method of observation must necessarily involve introspection—the examination of one's own mental state. Wundt referred to this method as internal perception. The method of introspection did not originate with Wundt; its use can be traced to Socrates. Wundt's innovation was the application of precise experimental control over the conditions under which introspection was performed.

Titchener's form of introspection, or self-observation, relied on observers who were rigorously trained to describe the elements of their conscious state rather than reporting the observed or experienced stimulus by a familiar name. Titchener realized that everyone learns to describe experience in terms of the stimulus. Titchener adopted Külpe's label, systematic experimental introspection, to describe his method. Like Külpe, Titchener used detailed, qualitative, subjective reports of his subjects' mental activities during the act of introspecting.

He opposed Wundt's approach, with its focus on objective, quantitative measurements, because he believed it was not useful for uncovering the elementary sensations and images of consciousness that were the core of his psychology.

Wundt & Tichener:

Wundt had recognized the elements or contents of consciousness, but his overriding concern was their organization; that is, their synthesis into higher-level cognitive processes through apperception. In Wundt's view, the mind had the power to organize mental elements voluntarily, a position that contrasted with the passive, mechanistic explanation favored by most of the British empiricists and associationists.

Titchener focused on mental elements or contents, and their mechanical linking through the process of association, but he discarded Wundt's doctrine of apperception. Titchener's work concentrated on the elements themselves. In Titchener's view, psychology's fundamental task was to discover the nature of the elementary conscious experiences—to analyze consciousness into its component parts and thus determine its structure.

Titchener's form of introspection, or self-observation, relied on observers who were rigorously trained to describe the elements of their conscious state rather than reporting the observed or experienced stimulus by a familiar name. Titchener realized that everyone learns to describe experience in terms of the stimulus—such as calling a red, shiny, and round object an apple—and that in everyday life this is beneficial and necessary. In his psychology laboratory, however, this practice had to be unlearned. Titchener adopted Külpe's label, systematic experimental introspection, to describe his method. Like Külpe, Titchener used detailed, qualitative, subjective reports of his subjects' mental activities during the act of introspecting. He opposed Wundt's approach, with its focus on objective, quantitative measurements, because he believed it was not useful for uncovering the elementary sensations and images of consciousness that were the core of his psychology.

Titchener differed from Wundt in that Titchener was interested in the analysis of complex conscious experience into its component parts, not in the synthesis of the elements through apperception. Titchener emphasized the parts, whereas Wundt emphasized the whole. In line with most of the British empiricists and associationists, Titchener's goal was to discover the so-called atoms of the mind.

Contributions of Structuralism:

Despite the criticisms, historians give due credit to the contributions of Titchener and the structuralists.

1. Their subject matter—conscious experience—was clearly defined. Their research methods, based on observation, experimentation, and measurement, were in the highest traditions of science. Because consciousness can only be perceived by the person having the conscious experience, the most appropriate method for studying that experience and that subject matter was some form of self-observation.
2. Although the subject matter and aims of the structuralists are no longer vital, the method of introspection—more broadly defined as the giving of a verbal report based on experience—continues to be used in many areas of psychology. Researchers in psychophysics still ask subjects to report whether a second tone sounds louder or softer than the first. Self-reports are requested from people exposed to unusual environments, such as weightlessness for space flight. Clinical reports from patients, and responses on personality tests and attitude scales, are introspective in nature. Introspective reports

involving cognitive processes such as reasoning are frequently used in psychology today. For example, industrial/organizational psychologists obtain introspective reports from employees about their interaction with computer terminals. This information can be used to develop user-friendly computer components and ergonomic chairs. Such verbal reports based on personal experience are legitimate forms of data collecting. Also, cognitive psychology, with its renewed interest in conscious processes, has conferred greater legitimacy on introspection Thus, the introspective method, though not the same as Titchener envisioned it, remains alive and well.

3. A significant contribution of structuralism was its service as a target of criticism. Structuralism provided a strong, established orthodoxy against which newly developing movements in psychology could array their forces. These newer schools of thought owed their existence in no small measure to their progressive reformulation of the structuralist position. We noted that advances in science require something to oppose. With Titchener's structuralism as an idea to oppose, psychology moved far beyond the initial boundaries of his system.